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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,405	05/08/2000	PAIVI HUOVINEN	365-442P	9154

2292 7590 05/19/2004

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EXAMINER
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RABAGO, ROBERTO

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/508,405	<b>Applicant(s)</b> HUOVINEN ET AL.	
	<b>Examiner</b> Roberto Rábago	<b>Art Unit</b> 1713	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-34, 36, 37 and 41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-34, 36, 37 and 41 is/are allowed.
- 6) ☒ Claim(s) 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claim 31 was inadvertently omitted from the claims rejected over Andtsjo '790 as set forth in item 4 of the office action mailed 11/18/2003, and incorrectly included in the list of allowed claims. Any inconvenience to applicants or their representatives is regretted.

#### ***Claim Rejections - 35 USC § 102 and/or 103***

2. Claim 31 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Andtsjo et al. (WO97/13790).

Examples 11-12 disclose a two-stage polymerization of propylene including a loop reactor as the first stage, followed by a gas phase fluidized bed reactor in the second polymerization stage. The first stage contains hydrogen for control of molecular weight, while the second stage contains little or no hydrogen (see also page 12, lines 21-23). The polymer from the loop reactor stage recites the required  $MFR_2$ , and the  $MFR_2$  of the overall polymer is substantially lower than that of the first stage. Although the  $MFR_2$  for the second stage polymer has not been separately reported, the claimed value would be inherent because prior examples have shown that this same catalyst would make a polymer with the claimed  $MFR_2$  when hydrogen is substantially or completely excluded (see Example 3). Although the reference has not disclosed whether recycle was used with the fluidized bed reactor, official notice is taken that the recycling of at least the fluidization medium is the most common configuration for the

Art Unit: 1713

operation of a fluidized bed polymerization reactor, and therefore the reference process would inherently include it or such use would be immediately envisaged by the ordinary skilled worker in this art. Accordingly, the cited examples include all claimed limitations, either expressly or inherently. The burden of proof is shifted to applicants to show that the applied reference examples do not contain all claimed limitations. In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

In the event that any differences can be shown for the product specified in the claims as opposed to the product taught in the applied reference, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985). Specifically, the reference directs that hydrogen should be substantially or completely removed from the reaction mixture before feeding to the gas phase reactor, and this recommended step further ensures that the  $MFR_2$  of the high molecular weight component would be lower than the maximum set forth in the instant claims.

#### ***Allowable Subject Matter***

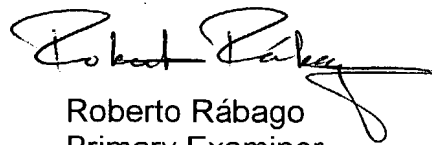
3. Claims 32-34, 36, 37 and 41 are allowed. Regarding the discussion of EP 743337 in the International preliminary examination report, it is noted that this reference has not disclosed the combination of a loop reactor and a gas phase reactor which makes the claimed polymers.

Art Unit: 1713

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roberto Rábago  
Primary Examiner  
Art Unit 1713

RR  
May 17, 2004